

Application Serial No. 10/037,284
Amendment dated
Reply to Office Action of May 16, 2006

REMARKS/ARGUMENTS

Claims 38-48, 51, and 53-77 have been cancelled without intending to abandon or to dedicate to the public any patentable subject matter. Claims 78-96 have been added. Accordingly, claims 78-96 are currently pending in the current application.

The Examiner rejects claims 38-40, 43, 46-47, and 75 under 35 U.S.C. §103(a) as being unpatentable over Peck et al. (U.S. 5,748,843) in view of Davis (U.S. 6,816,837); claim 41 under 35 U.S.C. §103(a) as being unpatentable over Peck et al. in view of Davis and further in view of Fitzpatrick et al. (U.S. 5,671,328); claims 42, 45, 48, 50, 53-54, 56, 58-64, 66-67, 69-72, and 76-77 under 35 U.S.C. §103(a) as being unpatentable over Peck et al. in view of Davis and further in view of Johnson (U.S. 5,835,571); claim 44 under 35 U.S.C. §103(a) as being unpatentable over Peck et al. in view of Davis and further in view of McAuliffe et al. (U.S. 6,212,541); claims 55 and 65 under 35 U.S.C. §103(a) as being unpatentable over Peck et al. in view of Johnson and further in view of Fitzpatrick et al., claims 57 and 68 under 35 U.S.C. §103(a) as being unpatentable over Peck et al. in view of Davis further in view of McAuliffe et al. and further in view of Johnson; and claims 73-74 under 35 U.S.C. §103(a) as being unpatentable over Peck et al. in view of Davis and further in view of Johnson and yet further in view of Hashimoto et al. (U.S. 5,632,002). However, since claims 38-48, 51, and 53-77 have been cancelled, the rejections of those claims under U.S.C. §103(a) are moot and should be withdrawn.

The cited references fail to teach or suggest at least the following italicized features of each independent claim:

78. A method of accessing information on a network, comprising:
receiving, from a user, a first voice command associated with at least a first macroinstruction;
in response to receiving the first voice command, prompting the user for a second voice command associated with the at least a first macroinstruction;
thereafter receiving, from the user, the second voice command associated with the at least a first macroinstruction; and
in response to receiving the second voice command, executing the at least a first macroinstruction.

87. A method of creating a voice macroinstruction, comprising:
receiving from a user at least one spoken word from a first user associated with creating a voice macroinstruction;
receiving from the user a voice command to be associated with the new voice macroinstruction;
receiving from the user a plurality of instructions to be included in the new voice macroinstruction;
creating the new voice macroinstruction using the received voice command and plurality of instructions;
querying the user whether the new voice macroinstruction is to be one of public and private;
when the user specifies that the new voice macroinstruction is to be private, providing only a first set of users with access to the voice macroinstruction; and
when the user specifies that the new voice macroinstruction is to be public, providing a second set of users with access to the voice macroinstruction, the second set of users including the first set of users and having a larger membership than the first set of users.

In one embodiment, the present invention is directed to a voice portal that uses voice macros to invoke a number of discrete voice commands by speaking the word or phrase corresponding to the voice macro. In one configuration, the voice portal first determines whether a spoken word or phrase matches one or more sets of macroinstructions in the macrolibrary and second, if the word or phrase is not in the macrolibrary, processes the spoken work or phrase as a

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nonmacroinstruction. A macroinstruction or macrostatement or set of macroinstructions or macrostatements is an executable instruction or set of executable instructions that represents and/or is associated with one or more other executable instructions while a "nonmacroinstruction" is an executable instruction or a set of executable instructions that do not qualify as a macroinstruction or set of macroinstructions. For example, a macroinstruction is often composed of a number of nonmacroinstructions. By first determining if the word or phrase is in the macrolibrary and then processing the voice command as a nonmacroinstruction, the voice agent prevents system conflicts where a word or phrase references both macro- and nonmacroinstructions. It also permits a macroinstruction to be invoked by the same word or phrase as an embedded macroinstruction and/or nonmacroinstruction. In another configuration, the voice portal, when a macroinstruction is named by a user, executes the instructions corresponding to the macroinstruction simultaneously or substantially simultaneously. In still another configuration, nested macroinstructions are instituted to increase the security associated with a particular macroinstruction. In a further configuration, the creation of macroinstructions can be tailored such that a public or private macroinstruction can be created, further adding to the security of a particular macroinstruction or set of macroinstructions.

Peck et al.

Peck et al. is directed to speech recognition control of apparel manufacture equipment. The operator can use a macro definition voice reference pattern to invoke verbally a series of

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digital control signals. That is, the computer, in response to the operator's command, records the order and timing of a series of verbal commands and executes the command sequence, in the proper order and at the proper timing, in response to a single operator command. Peck et al. uses a library of stored voice reference patterns and a separate operator specific library. The operator specific library includes both macroinstructions and nonmacroinstructions. Macroinstruction names are associated with a macro memory position instead of a digital control signal. It appears that nonmacroinstruction names or voice commands must be different from macroinstruction names to avoid system conflicts.

To invoke the macro capability, the operator must laboriously invoke a "macro" or learn mode and, to deactivate the capability, deactivate the learn mode. (Col. 12, lines 39-43.) In other words, the architecture of Peck et al. only searches for macroinstructions when and if the "learn" phrase is spoken by the user. When the "learn" phrase is spoken, it does not search the nonmacroinstruction or digital control signal portion of the operator specific library. (Col. 12, lines 32-67.)

Macroinstructions are created by activating the macro capability when the computer 14 is already in learn mode. In that event, the computer records the address, or position, of the digital control signal corresponding to the matched digitized voice reference pattern and the time between its selection and that of the prior digital control signal.

Peck does not teach receiving a first voice command associated with a first macroinstruction then prompting the user for a second voice command associated with the first

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macroinstruction. Moreover, Peck does not teach determining whether the first voice command corresponds to a macroinstruction then determining whether the second voice command corresponds to a nonmacroinstruction. Further still, Peck does not teach creating a voice macroinstruction that can be marked as either public or private.

Davis

Davis is directed to a voice controlled capture device, such as a flatbed scanner, hand-held scanner, or digital scanning camera, contains a processor that receives voice macros to control its operation. The device receives voice input, digitizes and sends the input to a second processor in a host computer system where speech recognition software interprets the voice input to select a macro and returns commands from the macro to the capture device where they are executed. Using an interface or macro recorder within the capture device and the speech recognition software within the host computer, the user can create voice macros incorporating individual voice commands. Davis teaches the creation, edition, and deletion of voice macros through voice interaction with the user. Davis, however, does not teach the creation of a voice macro that can be marked as either public or private by its creator.

Fitzpatrick et al.

Fitzpatrick et al. is directed to a method and processing system for automatically creating voice processing template entries. A number of commands or complex macro are assembled

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with one of the commands having a voice recognition criteria component associated with it. The system counts the occurrences of the commands, assembles voice recognition criteria components associated with the commands, and, when the count exceeds a selected minimum, constructs a voice recognition template entry or complex macro by associating the assembled voice recognition criteria components with the assembled commands. Each voice recognition criteria component of the template is associated with a conglomeration attribute (e.g., START, END, and NONE) and a macro and optional comment string. The voice recognition criteria component for each complex macro may be a concatenation of the separate voice recognition criteria components of the simpler macros from which the complex macro is created. (Col. 3, lines 13-20, and col. 4, lines 43-56.)

Johnson

Johnson is directed to a system for automatically interfacing a telephone user to an automated telephone service. Johnson teaches away from traditional macros and therefore teaches away from the present invention. (Col. 2, lines 14-17.) A macro is recorded, during a user's verbal negotiation of a menu, by saving a button type that is determined by the duration of the telephone button pressed, the button, and the time since press of the previous entry. In this manner, the user can invoke the saved recording of interface activity at any time so that the automated telephone service is interfaced to in an automatic manner. Thus, to record a macro the user must interface to an automated service and record the interaction. A macro can be invoked

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by button or voice.

The recording of the interaction is not a recording of voice commands, as claimed, but of DTMF signals. Buttons pressed along with time information between pressing of buttons is saved. Two types of DTMF buttons may be saved. A button of type IMMEDIATE will be used to the service without regard to prompting. A button type of WAIT will be issued to the service only after a moment of silence is detected. (Col. 3, lines 52-62.) When the desired macro is captured and the telephone macro is saved to a desired invocable sequence.

For example, multiple stock trades may be accomplished by repeating the following scenario: (1) a first macro to dial the telephone number and navigate to the desired point in the automated trading service menu; (2) a manually entered stock symbol; (3) a second macro to complete the trade; and (4) a third macro to navigate back to a navigation path where step 2 can be performed again. The macro is in a library of the contact center. It is not provided by the caller. This prevents the caller from waiting while a recorder plays a verbal response to each of the prompts, as described in Johnson.

McAuliffe et al.

McAuliffe et al. is directed to a computer implemented method and system for switching from one application to a second application. A user enters a "switch to" command, either directly or embedded within a macro. A determination is then made whether the application to be switched to is running. If the application is running, the focus of the operating system is

switched to the second application. If the second application is not running, then the application is launched. When determining whether the application is running, determinations are made regarding whether the application is invisible or owned.

Hashimoto et al.

Hashimoto et al. is directed to a speech recognition interface system capable of handling a number of application programs simultaneously and realizing convenient speech input and output modes which are suitable for applications in the windows systems and speech mail systems. At cols. 37 and 38, Hashimoto et al. discloses a speech recognition interface system for accessing voice mail. Voice macros are disclosed at col. 38.

Accordingly, the pending claims 78-96 are allowable.

The dependent claims provide further reasons for allowance.

By way of example, claim 81 describes a scenario in which the second voice command is embedded in the first voice command and the second voice command is required to be received prior to executing the first macroinstruction. The second voice command serves as a level of security associated with the first voice command and corresponding macroinstruction.

As another example, claim 82 describes a second macroinstruction that is associated with the second voice command. When the second voice command is received the second macroinstruction is performed along with or after the first macroinstruction that was also associated with the second voice command.

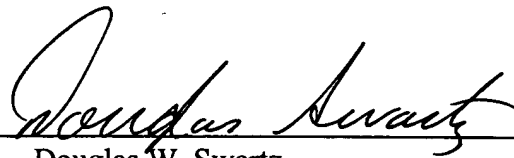
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Based upon the foregoing, Applicants believe that all pending claims are in condition for allowance and such disposition is respectfully requested. In the event that a telephone conversation would further prosecution and/or expedite allowance, the Examiner is invited to contact the undersigned.

Respectfully submitted,

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